DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018095

Address: 333 Burma Road **Date Inspected:** 06-Nov-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr.Oiu Wen. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Tower and Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

NDT

BAY 11

This QA Inspector performed randomly Visual Inspection of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as OBG Bike Path. The weld designations reviewed are as follows.

BK004A-020

NDT Notification No-07258

BAY 10

OBG Bike path plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040302, 053869, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A3-029-002, 010. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-Tc-U4c-F.

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This QA Inspector observed ZPMC qualified welding personnel identified as 040302, 053869, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A5-029-005, 008. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-Tc-U4c-F.

SMAW Process, Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 040268 Perform Shielded Metal Arc Welding (SMAW) on OBG Bike path. Joint identified as BK004A-029-8A, 8C, 9A, 9C, 10A. ZPMC QC Identified as Lijun with temporary repair report WRR-T-WR 16597. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G (3F) –Repair.

This QA Inspector observed ZPMC qualified welding personnel identified as 057266, Perform Flux Core Arc Welding (FCAW) on Tower Façade plate. Joint identified as ND1-SFSA4-711-1-9, 1-, 13, 14. ZPMC QC Identified as Wang Hao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 040581, Perform Shielded Metal Arc Welding (SMAW) on Tower Façade plate. Joint identified as ND1-SFSA4-711-1-5, 6, 11, 12. ZPMC QC Identified as Wang Hao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2114.

BAY 11

OBG Bike path plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040723, Perform Flux Core Arc Welding (FCAW) on OBG bike path. Joint identified as BK008A6-002-068, 069. ZPMC QC Identified as Wang Chiang Xin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2131. For more information see below attached picture number 1.

This QA Inspector observed ZPMC qualified welding personnel identified as 205649, Perform Flux Core Arc Welding (FCAW) on OBG bike path. Joint identified as BK008A6-002-084, 085. ZPMC QC Identified as Wang Chiang Xin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2131.

This QA Inspector observed ZPMC qualified welding personnel identified as 040704, 040723, 056640, 042218 Perform Flux Core Arc Welding (FCAW) on U Rib splice plate. Joint identified as GGL-MQ-1958-89~100-1, 2. ZPMC QC Identified as Libin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-Tc-U4b-F.

Tower SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040724, Perform Shielded Metal Arc Welding (SMAW) on Tower Bracket Stiffener lift 5. Joint identified as ND1-BRSA5-2-19B. ZPMC QC Identified as Shao Hai Lang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U4b.

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This QA Inspector observed ZPMC qualified welding personnel identified as 044541, Perform Shielded Metal Arc Welding (SMAW) on Tower Bracket Stiffener lift 5. Joint identified as SD1-BRSA5-1-6A. ZPMC QC Identified as Shao Hai Lang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b. For more information see below attached picture number 2.

SAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040699 Perform Submerged Arc Welding (SAW) on Tower lift 5 cover plate. Joint identified as ESD1-TL5-2B/F-53A. ZPMC QC Identified as Shao Hai Lang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-B-U3c-S-1.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho phone: 150002048250, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer